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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/739,209	12/17/2003	David W. Groves	SJO920030052US1	8493
31070	7590	09/19/2006	EXAMINER	
TIMOTHY N. ELLIS, PATENT ATTORNEY 8680 VIA MALLORCA, SUITE D LA JOLLA, CA 92037			NGUYEN, THAN VINH	
			ART UNIT	PAPER NUMBER
			2187	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/739,209

Applicant(s)

GROVES ET AL.

Examiner

Than Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/17/03, 11/2/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1) Claims 1-20 are pending.
- 2) The IDSes, filed 12/17/03 and 11/2/04, have been considered.

Claim Rejections - 35 USC § 101

- 3) 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 4) Claim 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims cite "A signal bearing medium tangibly embodying a program of machine-readable instructions". This is descriptive material, which is nonstatutory, as written. In order for the claims to be statutory, they must cite "computer readable-medium". (See MPEP 2106. When functional descriptive material is recorded on some **computer-readable medium** it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)). Thus, Applicant must modify the claim language from "A signal bearing medium" to "A Computer readable-medium" and "machine-readable" to "computer-readable".

Claim Rejections - 35 USC § 112

- 5) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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- 6) Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language of “making at least one method call to a CIM object” is vague and indefinite since it does not clearly indicate what functions of the CIM object. Without knowing this, one of ordinary skills would not know how to make/use the invention.

Claim Rejections - 35 USC § 102

- 7) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 8) Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Swank (US 6,697,924) “Swank”.

As to claim 1,16,18,19,20:

- 9) Swank teaches managing storage area networks. Swank teaches a program of computer-readable instructions executable by a digital processing apparatus to perform a method for assigning storage, the method comprising the following operations: receiving a request for storage, wherein the request includes a requested amount of storage space and connectivity information (receive request for a certain amount of space; 8/35-40; 22/50-52; 49/65-50/9; and interconnection data/path; 8/41-50; 60/30-65); identifying storage that is accessible by a requesting device based on the connectivity information (8/37-50;50/49-53); identifying all

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LUNs that are masked from all hosts, in the identified storage (12/41-45;50/50-53;60/30-36); selecting at least one identified LUN (8/55-60); and assigning the at least one selected LUN to the requesting device (50/10-12,45-67).

As to claim 2:

10) Swank teaches the method further comprises the operation of transmitting assignment information to the requesting device (8/41-67).

As to claim 3:

11) Swank teaches the operation of assigning the at least one selected LUN to the requesting device comprises making at least one method call to a CIM object (performing storage assignment; 8/55-60).

As to claim 4:

12) Swank teaches the operation of selecting at least one identified LUN comprises using a best-fit algorithm (select appropriate space size; 50/59-60/21).

As to claim 5,9:

13) Swank teaches the operation of identifying all previously allocated LUNs in the storage that is identified as being accessible by the requesting device (8/55-60).

As to claim 6:

14) Swank teaches the request further comprises a requested number of LUNs (request for a certain number of storage spaces; 8/35-40).

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As to claim 7:

15) Swank teaches determining if the operation of assigning the at least one selected LUN to the requesting device is completed successfully, and if not, performing the operation of assigning at least one identified LUN that was not previously assigned (60/44-56).

As to claim 8:

16) Swank teaches the operation of assigning at least one LUN that was not previously assigned comprises using a best-fit algorithm (50/59-60/21).

As to claim 10:

17) Swank teaches the operation of identifying storage that is accessible by the requesting device based on the connectivity information comprises identifying storage pools that are accessible by the requesting device (8/55-60; 50/49-55).

As to claim 11:

18) Swank teaches the requested amount of storage is in a storage pool specified in the request, and wherein the operation of identifying storage that is accessible by the requesting device based on the connectivity information comprises identifying storage in the storage pool specified in the request that is accessible by the requesting device (8/35-40).

As to claim 12:

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19) Swank teaches wherein the method further comprises the operation of determining if the connectivity information is good, and if it is determined that the connectivity information is not good, then the method further comprises the operation of failing the request (60/46-56).

As to claim 13:

20) Swank teaches the requesting device is a host, and wherein the request is a request for a file system extension (8/26-40).

As to claim 14:

21) Swank teaches the request originates as a manual request entered by a user (request from user/administrator; 9/60-65).

As to claim 15:

22) Swank teaches the request originates with an automated process associated with an external tool (8/35-40; 55-60).

As to claim 17:

23) Swank teaches the method comprising the following operations: receiving a request for a resource, wherein the request includes a requested quantity of the resource and connectivity information (receive request for a certain amount of space; 8/35-40; 22/50-52; 49/65-50/9; and interconnection data/path; 8/41-50; 60/30-65); determining if the connectivity information is good (60/46-56); identifying resources, that are accessible by the requesting device based on the connectivity information, and that are masked from all hosts (12/41-


45;50/50-53;60/30-36); selecting at least one identified resource, using a best fit algorithm(8/55-60; 50/59-60/21); and assigning the at least one selected resource to the requesting device (50/10-12,45-67).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Than Nguyen
Primary Examiner
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